Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

Long Island Sound 2016 INVERT

1.2. Summary description of the data:

This feature class resides within the BIOLOGY Feature Data Set of the Long Island Sound - 2016 ESI Geodatabase. It contains vector polygons representing sensitive biological resource data for invertebrates in Long Island Sound. The study area includes Long Island Sound, tidal tributaries and bays, freshwater streams, lakes, and land areas in New York and Connecticut. The 33 total invertebrate species include mollusks, crustaceans, and insects. Vector polygons in this data set represent invertebrate distributions, spawning and nursery areas, concentration areas, migration areas, harvest areas, and areas of vulnerable occurrence.

Species-specific abundance, seasonality, status, life history, and source information are stored in associated data tables (described in Entity Attribute Overview below) designed to be used in conjunction with this spatial data layer. This data set is a portion of the ESI data for Long Island Sound.

As a whole, the ESI data characterize the marine and coastal environments and wildlife by their sensitivity to spilled oil, and include information for three main components: shoreline habitats, sensitive biological resources, and human-use resources.

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2014 to 2016

1.5. Actual or planned geographic coverage of the data:

W: -73.9276, E: -71.7963, N: 41.987, S: 40.6881
This reflects the extent of all land and water features included in the overall Long Island Sound ESI study region. The bounding box for this particular feature class may vary depending on occurrences identified and mapped.

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Map (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
ESI Program Manager

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:

2.4. E-mail address:
orr.esi@noaa.gov

2.5. Phone number:

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
ESI Program Manager

3.2. Title:
Data Steward

4. Resources
Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

4.2. Approximate percentage of the budget for these data devoted to data management (

specify percentage or "unknown"):

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- 2016-06-01 00:00:00 - Selection of Species: Thirty-three species of invertebrates are represented in this atlas, and this is not intended to include all species present within the study area. Species were selected based on conservation interest (i.e. endangered, threatened, or special concern), ecological importance, or commercial or recreational importance. Mollusk species include nine bivalves, one cephalopod (longfin squid), and one gastropod (channeled whelk). Ten insect species are included, most of which are considered rare, threatened, or endangered. Other arthropod species include seven decapod crabs, three shrimps, horseshoe crab, and American lobster. In all, a total of 698 polygons are used to represent the distributions of the 33 selected invertebrate species. A total of 29 sources were cited to develop the invertebrate data set.
- 2016-06-01 00:00:00 - Developing information for species of concern: Distributions of rare, endangered, or threatened invertebrate species (e.g., coastal barrens buckmoth, scarlet bluet) were represented by developing polygons based on information provided state Natural Heritage Programs in both Connecticut and New York (CT DEEP 2015, NYS NHP 2015). Locations of horseshoe crab spawning areas were identified from published reports and digital GIS data provided by regional experts (Cornell Univ. 2016, Molloy Coll. 2015, Sacred Heart Univ. 2016).
- 2016-06-01 00:00:00 - Developing information for bivalve mollusks: Bivalve shellfish species in inshore waters include blue and ribbed mussels, bay scallop, eastern oysters, quahog (hard clam), softshell clam, and Atlantic surf clam. In New York portions of Long Island Sound and embayments, these species were largely mapped based on landings data and harvest zone polygons provided by NYS Department of Conservation (NYS DEC 2013). Bivalve shellfish in areas along the Connecticut shore were largely mapped using polygon representations of shellfish beds provided by CT Department of Agriculture \x96 Bureau of Aquaculture (CT Dept. Ag. 2016).
- 2016-06-01 00:00:00 - Developing information for mainstem Long Island Sound: In mainstem areas of Long Island Sound, information on invertebrate species was provided by published reports from the Long Island Sound Trawl Survey, conducted by Connecticut\x92s Marine Fisheries Division in Old Lyme, CT (Gotschall and Pacileo 2015). A study recently published by The Nature Conservancy is based on these trawl survey data, and presents results on a per-species basis (Anderson et al. 2015). Invertebrate species featured in these sources include

American lobster, longfin squid, horseshoe crab, and others.
- 2016-06-01 00:00:00 - Developing information for coastal embayments: In coastal embayments of the New York shore, Western Long Island (WLI) beach seine survey data (provided by NYSDEC staff) reported catch of invertebrate species as well as fishes (NYS DEC 2014b). Areas surveyed include Little Neck Bay, Manhassett Bay, Hempstead Harbor, Oyster Bay, Stony Brook Harbor, Port Jefferson Harbor, and Peconic Bay. Beach seine methods are especially effective for inshore species including blue crab, green crab, horseshoe crab, and spider crabs. Trawl survey data were also provided for Peconic Bay, with lady crab, spider crabs, blue crab, mantis shrimp, horseshoe crab, and longfin squid prominent in the catch (NYS DEC 2014a). New York Department of State\x92s assessments of \x93Significant Coastal Fish and Wildlife Habitat\x94 provided additional information on invertebrate species present in specific areas (NYDS 2015). For the coastal embayments and tidal tributaries on the Connecticut shore, results of the Connecticut Beach Seine Surveys, Inshore Surveys, and other site-specific surveys were applied (Howell 2015, Molnar and Howell 2015, Fell et al. 2003).

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

No

6.1.1. If metadata are non-existent or non-compliant, please explain:

Missing/invalid information:
- 1.7. Data collection method(s)
- 4.1. Have resources for management of these data been identified?
- 4.2. Approximate percentage of the budget for these data devoted to data management
- 5.2. Quality control procedures employed
- 7.1. Do these data comply with the Data Access directive?
- 7.1.1. If data are not available or has limitations, has a Waiver been filed?
- 7.1.2. If there are limitations to data access, describe how data are protected
- 7.2. Name of organization of facility providing data access
- 7.2.1. If data hosting service is needed, please indicate
- 7.3. Data access methods or services offered

- 7.4. Approximate delay between data collection and dissemination
- 8.1. Actual or planned long-term data archive location
- 8.3. Approximate delay between data collection and submission to an archive facility
- 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:

https://www.fisheries.noaa.gov/inport/item/47232

6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NOAA Data Documentation Procedural Directive: https://nosc.noaa.gov/EDMC/DAARWG/docs/EDMC_PD-Data_Documentation_v1.pdf

7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:

https://response.restoration.noaa.gov/esi_download

7.3. Data access methods or services offered:

7.4. Approximate delay between data collection and dissemination:

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Office of Response and Restoration - Seattle, WA

8.3. Approximate delay between data collection and submission to an archive facility:

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.